

**Alaska Energy Authority & Denali Commission  
Emerging Energy Technology Fund Progress Report**

**Grant Number:** 7310051

**Project Title:** Wind-Diesel Battery Hybrid for Kwigillingok

**Grantee:** Intelligent Energy Systems

**Reporting Period:** April 1, 2013 to June 30, 2013

**Deliverables Submitted:** Milestone 2 has been completed and invoiced. Milestone 1 is 90% complete and waiting final site agreement return from the community. Deliverables from milestone 1 of system one-line, installation narrative and instrumentation plan attached.

**Budget:** Advance request of \$475,500.00 for purchase of the battery system recovered under this progress report. Reflected in financial progress report. Total expenditures reported to date are \$475,500.00.

**Schedule Status:** Project milestone (3, 4 and 5) completion is slightly delayed due to secondary contractor availability, but will not have a significant impact on completion of project or overall project timeline. Large items necessary for summer transportation schedule seem to be on time. Installation materials have cleared the barge schedule.

**Percent Complete:** 35% project completion overall.

Milestone	Task		Deliverables	Deliverables
	1	Complete site design	System one-line, site agreement, installation narrative, instrumentation plan	90% Complete
	2	Procure battery and inverter		100% Complete
	3	Install instrumentation and collect baseline data		In progress
	4	Economic analysis	Economic analysis	Initiated
	5	System modeling	Modeling summary report	In progress
	6	Factory acceptance testing	Acceptance test results	
	7	Procure remaining equipment		
	8	Deliver materials to site		In progress
	9	Installation and commissioning	Commissioning report	
	10	Long term monitoring		
	11	Data evaluation and draft project report	Draft project report	
	12	Final project report	Final report	

**Work Progress:** Module design completed in conjunction with project partners and engineering team. Community approved site location for module interconnection. Installation materials acquired and freighted to meet barge schedule. Instrumentation and monitoring initiated. Battery module scheduled to arrive in Kwig in September.

**Future Work:** Economic analysis site visits to be scheduled based on availability of ISER. System modelling is on-going. Schedule of installation team to Kwig includes LG Chem techs, ABB commissioning team, and project partner engineers. Expected commissioning set for November 2013.

Project remains on budget with no significant problems foreseen. Slight delay of milestones dependent on contractor availability, but no freight delivery issues due to barge and transportation schedules.